The photograph shows the stars from 8th to 15th mag., and several of them have what appear to be *comites*, at a few seconds of arc distance; but this characteristic is not more remarkable in this cluster and its surroundings than it is on many other photographs which I have taken in different regions of the sky. The cluster is not strikingly round or symmetrical, nor are the stars very close together, and it is entirely free from nebulosity.

About 40 minutes of arc from the cluster, in the north following quadrant (R.A. $1^h\ 28^m$, Decl. N. 60° 48′), is a very remarkable group of stars arranged in two parallel straight lines of four each. The stars are all of about 10th mag., and the photo-disks partly overlap each other, so that the combination appears like a star trail; and, in order to make sure that it was not a trail, a second photograph was taken with a short exposure. The group is surrounded by stars of 10th to 14th mag.

Comet Holmes. By Isaac Roberts, D.Sc., F.R.S.

In the *Edinburgh Circular*, No. 37, 1893 January 17, it was announced that Professor Palisa, of Vienna, saw Comet Holmes as an 8th-magnitude fixed star with a nebulous envelope 20 seconds of arc in diameter, and Dr. Huggins had, a day or two previously, called my attention to the announcement.

A photograph of the comet was taken with the 20-inch reflector on January 18, and exposure of 30 minutes, upon which it appeared as a very dense circular nucleus surrounded by symmetrical nebulosity, which gave the comet the appearance of a nebulous star. The extreme diameter of the nebulosity measured 39 seconds of arc, and the diameter of the nucleus measured 14 seconds. The nucleus and the nebulosity had not well-defined boundaries, but one shaded into the other imperceptibly.

On January 20 another photograph was taken with an exposure of 50 minutes, and on this also the comet appears like a large nebulous star, the extreme diameter of which measured 145 seconds of arc, and the diameter of the nucleus 53 seconds. The nucleus and the nebulosity surrounding it are very dense and symmetrically circular, without sharply defined boundaries.

On January 27 another photograph was taken, with exposure of 15 minutes, upon which the comet appears with a faint nucleus, a faint tail, and very faint nebulosity surrounding them, much like the form shown on the photograph presented to the Society at the meeting in December last.

On February 4 another photograph was taken, with exposure of 52 minutes, and the appearance of the comet very strongly resembled that referred to in the foregoing paragraph—it had a nucleus, a tail, and faint nebulosity surrounding them; much like those shown on the photograph presented in December.

The negatives do not indicate any stars or nebulæ on the orbital course of the comet that might temporarily add to its brightness when in transit over them, but whatever the cause may have been, the reality of the phenomena can scarcely be doubted, for both eye-observations and the photographs confirm each other.

On the Orbit of Σ 1785. By J. E. Gore.

Using the measures of this binary pair given by Mr. Burnham in the *Monthly Notices* for 1892 December, I have computed the orbit, and find the following provisional elements —

Elements of Σ 1785.

P = 125·52 years	☊ = 137° 1′
T = 1904·84	λ = 220° 21′
e = 0·6377	a = 2″·18
i = 34° 46′	μ = +2°·868

The following is a comparison between the measures and the positions computed from the above elements:—

Epoch.	Observer.	θ_o	θ_c	$\theta_o-\theta_c$	ρ_o	ρ_c	$\rho_o-\rho_c$
		°	°	°	″	″	″
1823·40	South	160·4	157·3	+3·1	5·66	3·25	(+2·41)
1830·12	Struve	164·4	162·7	+1·7	3·49	3·33	+0·16
1830·20	Herschel	164·5	162·8	+1·7	4·62	3·33	(+1·29)
1831·34	Herschel	166·3	163·6	+2·7	(7·69)	3·38	(+4·31)
1843·48	Mädler	174·6	173·0	+1·6	3·39	3·30	+0·09
1846·40	Philpott	176·2	175·3	+0·9	3·19	3·26	−0·07
1850·44	Mädler	178·0	178·7	−0·7	...	3·18	...
1851·28	Mädler	178·7	179·4	−0·7	3·48	3·16	+0·32
1855·32	Mädler	183·6	182·9	+0·7	3·11	3·08	+0·03
1856·31	Mädler	183·1	184·0	−0·9	2·97	3·05	−0·08
1856·36	Secchi	186·0	184·0	+2·0	3·24	3·05	+0·19
1858·38	Dembowski	185·1	185·8	−0·7	3·12	3·05	+0·12
1859·32	Morton	185·4	186·7	−1·3	2·89	2·97	−0·08
1861·57	Mädler	190·0	188·9	+1·1	3·51	2·90	+0·61
1863·31	Radcliffe	192·0	190·7	+1·3	2·73	2·83	−0·10
1863·68	Dembowski	191·1	191·1	0·0	2·66	2·82	−0·16
1864·47	Engelmann	193·5	192·0	+1·5	2·88	2·80	+0·08
1865·42	Engelmann	193·8	193·0	+0·8	2·87	2·77	+0·10